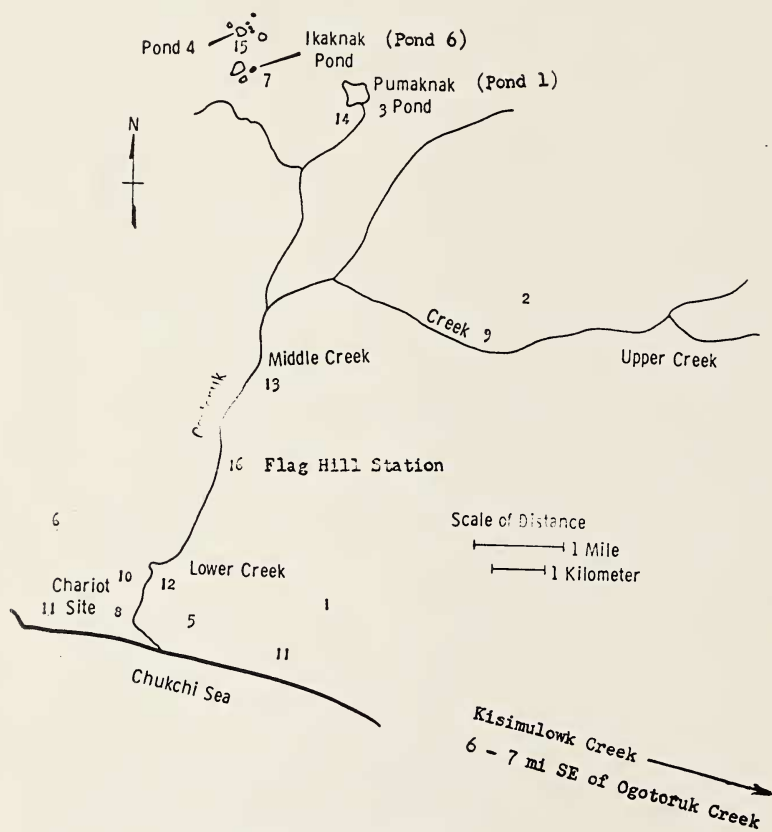


ARCTIC MUSCIDAE FROM THE CAPE THOMPSON REGION OF ALASKA (DIPTERA)

By H. C. HUCKETT, Riverhead, N. Y.

A noteworthy collection of flies belonging to the families Anthomyiidae and Muscidae has recently been received, composed of specimens taken in the region of Cape Thompson, Alaska, near 68° latitude. The material represents a part of the Project Chariot Bioenvironmental Study in association with the general Plowshare Program of the United States Atomic Energy Commission, and was furnished for study by the staff at the Biology Laboratory of the General Electric Company at Richland, Washington. A map of the collecting sites of the Ogotoruk area was provided and is



here reproduced.

The collections were made during the months of June, July and August, 1959 to 1962, in part by J. J. Davis, W. C. Hanson, R. R. Adee, H. E. Erdman, D. E. Douglass, D. G. Watson, W. O. Pruitt and E. Paddock.

I have been able to recognize 81 species, of which 14 are regarded as new to science. Of the latter, one is herewith described and 13 are included in a forthcoming treatise on the arctic and subarctic Muscidae of North America.

***Fucellia biseriata*, n. sp.**

Male.—Resembling *F. pictipennis* Becker, from which the male of *biseriata* may be distinguished by the series of short coarse bristles on both antero- and posteroventral surfaces of hind femur. Head with frons wider than distance between first pair of dorsocentral bristles, interfrontalia dull red, with one pair of cruciate bristles, parafrontals, parafacials and cheeks browned, face and occiput gray, second antennal segment grayish, third blackish, third aristal segment slightly thickened on proximal half, palpi pale gray, margins pallid, dilated on distal half, haustellum polished. Mesonotum with 2 brownish stripes each along planes of dorsocentral bristles, scutellum brownish at base of basal bristles, meso- and metapleural spiracles with pale peritremes and enlarged, prealar bristle present, sternopleural bristles arranged 2 or 3: 2. Abdomen gray, with a faint darker stripe, processes of sternum 5 with a few slender bristles on distal half of inner margin and of outer border.

Fore tibia with a fine mid anterodorsal and setulose posteroventral bristle, mid femur with proximal series of slender anteroventral and extensive series of firm erect posteroventral bristles that are scarcely longer than maximum height of femur, and becoming weaker on distal third, mid tibia with 1 anterodorsal and postero-dorsal bristle respectively, and a weak setulose ventral bristle evident in type under higher powers, hind femur with extensive series of 12 to 14 short anteroventral and a similar series of shorter coarse posteroventral bristles extending to basal region of femur, the latter having 2 or 3 slender posteroventral bristles fully as long or longer than height of femur where situated, hind tibia with 3 anterodorsal, 2 posterodorsal and a weak setulose anteroventral bristle, preapical mid dorsal set at a level basad of preapical anterodorsal bristle.

Wings grayish and unmarked, cross veins faintly darkened, costal setulae coarse, knobs of halteres purplish. Length, 4.5 mm.

Holotype.—♂, Junction of Noatak and Kelly Rivers, Cape

Thompson, Alaska, 12 Aug. 1962. (Douglass) U.S.N.M.

Additional records:

- Fucellia antennata* Stein. Lower Ogotoruk Creek¹, 2 ♂, 5 ♀. Kisimulowk Creek, 2 ♂, 1 ♀.
- Fucellia pictipennis* Becker. O. C., Pond 1, 1 ♂, 1 ♀; Pond 6, 1 ♀.
- Pseudochirosia albipennis* Ringdahl. O. C., Pond Area, 3 ♂, 3 ♀.
- Hylemya variata* (Fallén). O. C. Valley, 1 ♂, 1 ♀. Flag Hill, 2 ♀. Chariot Site, 1 ♂.
- Delia echinata* (Séguy). UA Botany Plot 9, 2 ♂, 2 ♀. $\frac{3}{4}$ mi from sea shore, 1 ♀.
- Delia liturata* (Meigen). O. C., Pond Area, 1 ♂.
- Delia pratensis* (Meigen). O. C. and shore, 1 ♂, 1 ♀.
- Delia rondanii* (Ringdahl). O. C., Pond Area, 1 ♂, 1 ♀. Flag Hill, 1 ♂.
- Lasiomma morionella* (Zetterstedt). O. C. Valley, 1 ♀; Pond Area, 1 ♀; Pond 1, 2 ♂. Flag Hill, 1 ♀.
- Lasiomma octoguttata moesta* (Holmgren). Flag Hill, 1 ♀.
- Pegohylemyia betarum* (Lintner). Flag Hill, 1 ♂, 2 ♀.
- Pegohylemyia hucketti* Ringdahl. Flag Hill, 1 ♂.
- Pegohylemyia incursa* (Malloch). O. C. Valley, 1 ♀; Pond 4, 1 ♀. Ponds at source of O. C., 1 ♂, 1 ♀. Kisimulowk Creek, 1 ♂.
- Pegohylemyia profuga* (Stein). O. C. Valley, 1 ♀. O. C. and shore, 1 ♀. Ponds at source of O. C., 1 ♀.
- Pegohylemyia sericea* (Malloch). Kisimulowk Creek, 1 ♀.
- Egle atomaria* (Zetterstedt). Crowbill Mountain, 1 ♂.
- Egle pilitiba* Ringdahl. UA Botany Plot 9, 1 ♀.
- Paregle radicum* (Linnaeus). Flag Hill, 1 ♀. Junction of Noatak-Kelly Rivers, 1 ♀.
- Craspedochaeta pullula* (Zetterstedt). O. C., Pond Area, 1 ♀.
- Eremomyia turbida* Hockett. UA Botany Plot 9, 1 ♂.
- Pegomya corrupta* Hockett. O. C., Snowpatch, 7 ♂; Pond 4, 2 ♂, 4 ♀. Upper Creek Station, 1 ♀. Flag Hill, 1 ♂, 12 ♀. Chariot Site, 1 ♂, 1 ♀.
- Pegomya icterica* (Holmgren). O. C. Valley, 1 ♀.
- Pegomya indicta* Hockett. O. C., Pond 1, 1 ♀.
- Pegomya pilosa* Stein. O. C., Snowpatch, 1 ♂. Flag Hill, 2 ♂, 1 ♀. Crowbill Mountain, 1 ♂.
- Pegomya tenera obscurior* Collin. O. C., Snowpatch, 2 ♀. Flag Hill, 1 ♀.
- Pegomya tunicata* (Zetterstedt). O. C., Pond 4, 1 ♂.

¹ Ogotoruk Creek is hereafter abbreviated to O. C.

- Nupedia pseudodissecta* (Ringdahl). O. C. and dunes, 1 ♂; Pond 1, 1 ♂; Pond 4, 1 ♂, 3 ♀. Flag Hill, 3 ♂, 3 ♀. UA Botany Plot 4, 2 ♀. $\frac{3}{4}$ mi from sea shore, 1 ♀. Kisimulowk Creek, 1 ♂.
- Pseudonupedia intersecta arctica* (Ringdahl). O. C., Pond 4, 1 ♀. UA Botany Plot 4, 1 ♀.
- Paraprosalpia incisa* (Ringdahl). O. C. Pond 6, 1 ♂.
- Paraprosalpia moerens* (Zetterstedt). O. C., Pond 1, 1 ♂, 2 ♀; Pond 6, 1 ♀. Upper Creek Station, 1 ♂.
- Hydrophoria alaskensis* Malloch. O. C., Pond 1, 1 ♂; Pond 6, 1 ♂. Upper Creek Station, 1 ♂, 1 ♀. UA Botany Plot 9, 1 ♂, 3 ♀. Crowbill Mountain, 4 ♂, 3 ♀.
- Hydrophoria brunneifrons* (Zetterstedt). $\frac{3}{4}$ mi from sea shore, 1 ♂.
- Hydrophoria frontata* (Zetterstedt). O. C., Pond 6, 1 ♀. Upper Creek Station, 1 ♀.
- Hydrophoria polita* Malloch. O. C. Valley, 1 ♂; Pond 6, 1 ♀.
- Hydrophoria seticauda* Malloch. Flag Hill, 1 ♀.
- Hydrophoria teate* (Walker). O. C., Pond at source, 1 ♂, 1 ♀; Pond 1, 2 ♀; Pond 4, 4 ♀; Pond 6, 3 ♀. Flag Hill, 1 ♂.
- Hydrophoria tristis* (Ringdahl). O. C., Pond 6, 1 ♂.
- Limosia atritibia* (Ringdahl). O. C. Valley, 1 ♀. UA Botany Plot 9, 1 ♀.
- Hoplogaster octopunctata* (Zetterstedt). UA Botany Plot 9, 1 ♀.
- Lispocephala erythrocerata* (Robineau-Desvoidy). O. C., Pond 4, 1 ♀.
- Spilogona arctica* (Zetterstedt). O. C., Pond 4, 1 ♂; Pond 6, 1 ♀. Flag Hill, 10 ♂, 6 ♀. Chariot Site, 1 ♂. Kisimulowk Creek, 1 ♂.
- Spilogona arenosa* (Ringdahl). Flag Hill, 1 ♀.
- Spilogona baltica* (Ringdahl). Flag Hill, 1 ♂.
- Spilogona fimbriata* (Schnabl). O. C., Pond 6, 1 ♂.
- Spilogona imitatrix* (Malloch). O. C., Pond 4, 1 ♂. Flag Hill, 1 ♂.
- Spilogona latilamina* Collin, Flag Hill, 1 ♀.
- Spilogona malaisei* (Ringdahl). O. C., Pond 4, 1 ♀. Flag Hill, 1 ♀.
- Spilogona micans* (Ringdahl). Flag Hill, 1 ♂.
- Spilogona norvegica* Ringdahl. O. C., Snowpatch, 1 ♀; Pond 4, 4 ♀. Upper Ogotoruk Creek, 1 ♀. Flag Hill, 2 ♀.
- Spilogona obsoleta* (Malloch). O. C., Ponds at source, 1 ♂.
- Spilogona opaca* Schnabl. Flag Hill, 2 ♂, 2 ♀.
- Spilogona pseudodispar* (Frey). O. C., Pond Area, 1 ♀.

- Spilogona pusilla* Hockett. Flag Hill, 1 ♀.
Spilogona sospita Hockett. O. C. Valley. 1 ♂, 1 ♀. O. C. and shore, 1 ♀; Ponds at source, 1 ♀. Kisimulowk Creek, 1 ♂.
Spilogona triangulifera (Zetterstedt). O. C., Pond 6, 4 ♂, 7 ♀. Upper Creek Station, 1 ♂. Kisimulowk Creek, 1 ♀.
Helina bohemani Ringdahl. O. C., Pond at source, 1 ♀.
Helina luteisquama Ringdahl. O. C., Pond Area, 1 ♀. Flag Hill, 1 ♂.
Mydaea palpalis Stein. O. C., Pond 1, 1 ♀. Upper Creek Station, 2 ♂, 1 ♀. Flag Hill, 1 ♂. UA Botany Plot 4, 2 ♂. Kisimulowk Creek, 1 ♂.
Fannia aethiops Malloch. Middle O. C., 1 ♂.
Fannia manicata (Meigen). Junction of Noatak-Kelly Rivers, 2 ♀.
Fannia spathiophora Malloch. UA Botany Plot 4, 1 ♀.
Fannia tundrae Chillcott. O. C., Pond 4, 1 ♂.
Hydrotaea bispinosa (Zetterstedt). $\frac{3}{4}$ mi from sea shore, 1 ♂. Flag Hill, 1 ♂, 1 ♀.
Hydrotaea cristata Malloch. Junction of Noatak-Kelly Rivers, 1 ♀.
Lasioptis subrostratus (Zetterstedt). UA Botany Plot 9, 1 ♂.
Phaonia rugia (Walker). Flag Hill, 1 ♂.
Lophosceles frenatus (Holmgren). O. C. Valley, 1 ♂. Upper O. C., 1 ♂. UA Botany Plot 4, 1 ♂, 1 ♀. Kisimulowk Creek, 1 ♂, 1 ♀.

BOOK REVIEW

Lepidoptera of Florida by Charles P. Kimball, with an Index of Plant Foods, an annotated Bibliography, Map and Gazetteer of Florida, 363 pp., 6 plates in color, 20 plates in black and white, published by the Division of Plant Industry, Florida Department of Agriculture, 1965, (Price, \$5.00)

In a foreword, the Editor, Howard V. Weems, Jr., states that this is the first of a series of publications, relating to insects and other arthropods of Florida, the Bahamas and West Indies with emphasis on taxonomy, biology, ecology and zoogeography. If subsequent volumes measure up to this one in scope and treatment and are as handsomely mounted, the series will be a notable contribution to the literature.

Almost a half century has elapsed since John A. Grossbeck's List of Florida Lepidoptera was published by the American Museum of Natural History, under the editorship of Frank E. Watson, after Grossbeck's untimely death in Barbados in 1914. This was the first comprehensive survey of the Lepidoptera of Florida and it is sur-